

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	360	venom near4 (protease\$1 or metalloproteinase\$1 or metalloprotease\$1)	US-PGPUB; USPAT	OR	OFF	2004/11/16 09:15
L2	2182	cobra	US-PGPUB; USPAT	OR	OFF	2004/11/16 09:15
L3	24	1 same 2	US-PGPUB; USPAT	OR	OFF	2004/11/16 09:15
L4	1418	psgl or (p adj selectin)	US-PGPUB; USPAT	OR	OFF	2004/11/16 09:15
L5	145	(protease\$1 or metalloproteinase\$1 or metalloprotease\$1) same 4	US-PGPUB; USPAT	OR	OFF	2004/11/16 09:16
L6	14	1 and 5	US-PGPUB; USPAT	OR	OFF	2004/11/16 09:16
L7	10	mocarhagin	US-PGPUB; USPAT	OR	OFF	2004/11/16 09:16
(L8)	36	3 or 6 or 7	US-PGPUB; USPAT	OR	OFF	2004/11/16 09:17

PGPUB-DOCUMENT-NUMBER: 20040185036

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040185036 A1

TITLE: Compositions and methods for prolonging survival of  
platelets

PUBLICATION-DATE: September 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Stossel, Thomas P.	Belmont	MA	US	
Hartwig, John H.	Jamaica Plain	MA	US	
Hoffmeister, Karin M.	Cambridge	MA	US	
Clausen, Henrik	Holte	DK		

APPL-NO: 10/ 704377

DATE FILED: November 7, 2003

RELATED-US-APPL-DATA:

non-provisional-of-provisional 60424807 20021108 US

US-CL-CURRENT: 424/94.61, 514/50

ABSTRACT:

The present invention provides modified platelets having a reduced platelet clearance and methods for reducing platelet clearance. Also provided are compositions for the preservation of platelets. The invention also provides methods for making a pharmaceutical composition containing the modified platelets and for administering the pharmaceutical composition to a mammal to mediate hemostasis.

RELATED APPLICATIONS

[0001] This application claims priority under 35 U.S.C. .sctn. 119(e) to U.S. Provisional Application Serial No. 60/424,807, entitled "Compositions and Methods for Prolonging Survival of Platelets," filed on Nov. 8, 2002, which is herein incorporated by reference in its entirety.

----- KWIC -----

Brief Description of Drawings Paragraph - DRTX

(9):

[0061] FIG. 5 shows GP1b.alpha.-CR3 interaction mediates phagocytosis of chilled human platelets in vitro. FIGS. 5A and 5B show a representative assay result of THP-1 cells incubated with room temperature (RT) (FIG. 5A) or chilled-rewarmed (Cold) platelets (FIG. 5B). CM-Orange-labeled platelets associated with macrophages shift in orange fluorescence up the y axis. The mean percentage of the CM-Orange positive native macrophages incubated with platelets kept at room temperature was normalized to 1. Chilling of platelets increases this shift from .about.4% to 20%. The platelets are predominantly ingested, because they do not dual label with the FITC-conjugated mAb to CD61.

FIG. 5C Undifferentiated (open bars) THP-1 cells express about 50% less CR3, and ingest half as many chilled-rewarmed platelets. Differentiation (filled bars) of CR3 expression however, had no significant effect on the uptake of RT platelets. Treatment of human platelets with the snake venom metalloprotease, mocarhagin (Moc), which removes the N-terminus of GPIb.alpha. from the surface of human platelets (inset; control: solid line, mocarhagin treated platelets: shaded area), reduced phagocytosis of chilled platelets by about 98%. Data shown are means  $\pm$  SD of 5 experiments.

Detail Description Paragraph - DETX (45):

[0115] We obtained fluorescein isothiocyanate (FITC)-conjugated annexin V, phycoerythrin (PE)-conjugated anti-human CD11b/Mac-1 monoclonal antibodies (mAb), FITC-conjugated anti-mouse and anti-human IgM mAb, FITC-conjugated anti-mouse and anti-human CD62P-FITC mAb from Pharmingen (San Diego, Calif.); FITC-conjugated rat anti-mouse anti-human IgG mAb from Santa Cruz Biotechnology, Inc. (Santa Cruz, Calif.); FITC-conjugated anti-human CD61 mAbs (clone BL-E6) from Accurate Scientific Corp. (Westbury, N.Y.); FITC-conjugated anti-human GPIb.alpha. mAb (clone SZ2) from Immunotech (Marseille, France); and FITC-conjugated polyclonal rabbit anti-vWf antibody from DAKOCytomation (Glostrup, Denmark). We purchased EGTA-acetoxymethylester (AM), Oregon Green coupled fibrinogen from human plasma, CellTracker.TM. Orange CMTMR; CellTracker Green CMFDA, Nile-red (535/575) coupled and carboxylate-modified 1  $\mu$ m microspheres/FluoSpheres from Molecular Probes, Inc. (Eugene, Oreg.) and  $^{111}$ Indium from NEN Life Science Products (Boston, Mass.). We purchased Cytochalasin B, dimethyl sulfoxide (DMSO), trisodium isothiocyanate (TRITC), human thrombin, prostaglandin E1 (PGE<sub>1</sub>), phorbol ester 12-tetradecanoylphorbol-13 acetate (PMA), A23187 ionophore from Sigma (St. Louis, Mo.); botrocetin from Centerchem Inc. (Norwalk, Conn.); and O-sialoglycoprotein-endopeptidase from Cerladane (Hornby, Canada). HBSS containing Ca<sup>2+</sup> and Mg<sup>2+</sup>, pH 6.4; RPMI 1640; 0.05% Trypsin-EDTA (0.53 mM) in HBSS without Ca<sup>2+</sup> and Mg<sup>2+</sup>; and other supplements (penicillin, streptomycin and fetal bovine serum) were from GIBCO Invitrogen Corp. (Grand Island, N.Y.). TGF- $\beta$ 1 from Oncogene Research Products (Cambridge, Mass.); 1,25-(OH)<sub>2</sub> vitamin D3 from Calbiochem (San Diego, Calif.); and Adenosine-5'-Diphosphate (ADP) were from USB (Cleveland, Ohio). Avertin (2,2,2-tribromoethanol) was purchased from Fluka Chemie (Steinheim, Germany). Collagen related peptide (CRP) was synthesized at the Tufts Core Facility, Physiology Dept. (Boston, Mass.) and cross-linked as previously described (Morton et al., 1995). Mocarhagin, a snake venom metalloprotease, was provided by Dr. M. Berndt, Baker Medical Research Institute, Melbourne Victoria 318 1, Australia. Additional unconjugated anti mouse GPIb.alpha. mAbs and a PE-conjugated anti-mouse GPIb.alpha. mAb pOp4 were provided by Dr. B. Nieswandt (Witten/Herdecke University, Wuppertal, Germany). We obtained THP-1 cells from the American Type Culture Collection (Manassas, Va.).

Detail Description Paragraph - DETX (50):

[0120] The N-terminus of GPIb.alpha. was enzymatically removed from the surface of chilled or room temperature maintained and labeled platelets in buffer B, also containing 1 mM Ca<sup>2+</sup> and 10  $\mu$ g/ml of the snake venom metalloprotease mocarhagin (Ward et al., 1996). After the enzymatic digestion, the platelets were washed by centrifugation with 5 times volume of buffer A and routinely checked by microscopy for aggregates. GPIb.alpha.-N-terminus removal was monitored by incubating platelet suspensions with 5  $\mu$ g/ml of FITC-conjugated anti-human GPIb.alpha. (SZ2) mAb for 10 min at room temperature and followed by immediate flow cytometry analysis on a FACScalibur Flow Cytometer (Becton Dickinson Biosciences, San Jose, Calif.). Platelets were gated by forward/side scatter characteristics and 50,000 events acquired.

Detail Description Paragraph - DETX (94):

[0164] Differentiation of human monocytoid THP-1 cells using TGF- $\beta$ 1 and 1,25-(OH) $_2$  Vitamin D3 increases expression of CR3 by about 2-fold (Simon et al., 1996). Chilling resulted in 3-fold increase of platelet phagocytosis by undifferentiated THP-1 cells and a about 5-fold increase by differentiated THP-1 cells (FIGS. 5B and 5c), consistent with mediation of platelet uptake by CR3. In contrast, the differentiation of THP-1 cells had no significant effect on the uptake of room temperature stored platelets (FIGS. 5A and 5c). To determine if GPIb.alpha. is the counter receptor for CR3-mediated phagocytosis on chilled human platelets, we used the snake venom metalloprotease mocarhagin to remove the extracellular domain of GPIb.alpha. (Ward et al., 1996). Removal of human GPIb.alpha. from the surface of human platelets with mocarhagin reduced their phagocytosis after chilling by about 98% (FIG. 5C).

Detail Description Paragraph - DETX (152):

[0221] Ward, C., Andrews, R., Smith, A. and Berndt, M. (1996). Mocarhagin, a novel cobra venom metalloproteinase, cleaves the platelet von Willebrandt factor receptor glycoprotein Ib.alpha..

Detail Description Paragraph - DETX (176):

[0244] We localized the exposed  $\beta$ -GlcNAc residues mediating  $\alpha$ -M $\beta$ 2 lectin domain recognition of GPIb.alpha. N-glycans. The extracellular domain of GPIb.alpha. contains 60% of total platelet carbohydrate content in the form of N- and O-glycosidically linked carbohydrate chain. Accordingly, binding of peroxidase-labeled WGA to GPIb.alpha. is easily detectable in displays of total platelet proteins resolved by SDS-PAGE, demonstrating that GPIb.alpha. contains the bulk of the  $\beta$ -GlcNAc-residues on platelets, and binding of WGA to GPIb.alpha. is observable in GPIb.alpha. immunoprecipitates. UDP-Gal with or without added galactosyltransferase diminishes S-WGA binding to GPIb.alpha., whereas RCA I binding to GPIb.alpha. increases. These findings indicate that galactosylation specifically covers exposed  $\beta$ -GlcNAc residues on GPIb.alpha.. Removal of the N-terminal 282 residues of GPIb.alpha. from human platelet surfaces using the snake venom protease mocarhagin, which inhibited phagocytosis of human platelets by THP-1 cells in vitro, reduces S-WGA binding to chilled platelets nearly equivalent to S-WGA room temperature binding levels. WGA binds predominantly to the N-terminus of GPIb.alpha. released by mocarhagin into platelet supernatant fluids as a polypeptide band of 45 kDa recognizable by the monoclonal antibody SZ2 specific for that domain. The glycans of this domain are N-linked. A small portion of GPIb.alpha. remains intact after mocarhagin treatment, possibly because the open canalicular system of the platelet sequesters it. Peroxidase-conjugated WGA weakly recognizes the residual platelet associated GPIb.alpha. C-terminus after mocarhagin cleavage, identifiable with monoclonal antibody WM23.

Detail Description Paragraph - DETX (178):

[0246] Effects of  $\beta$ -Hexosaminidase ( $\beta$ -Hex) and Mocarhagin (MOC) on FITC-WGA Lectin Binding to Chilled Versus Room Temperature Stored Platelets.

Detail Description Paragraph - DETX (179):

[0247] The enzyme  $\beta$ -hexosaminidase catalyzes the hydrolysis of terminal  $\beta$ -D-N-acetylglucosamine (GlcNAc) and galactosamine (GalNAc) residues from oligosaccharides. To analyze whether removal of GlcNAc residues reduces the binding of WGA to the platelet surface, chilled and room temperature washed human platelets were treated with 100 U/ml  $\beta$ -Hex for 30 min at 37 degree C. FIG. 11A shows the summary of FITC-WGA binding to the surface of room temperature or chilled platelets obtained by flow cytometry before and after  $\beta$ -hexosaminidase treatment. FITC-WGA binding to chilled platelets was reduced by 85% after removal of GlcNAc (n=3). We also checked whether, as expected, removal of GPIb.alpha. from the platelet surface leads to reduced

WGA-binding after platelet chilling. GPIb.alpha. was removed from the platelet surface using the snake venom mocarhagin (MOC), as described previously (Ward et al, Biochemistry 28, 8326-8336, 1996). FIG. 11B shows that GPIb.alpha. removal from the platelet surface reduced FITC-WGA binding to chilled platelets by 75% and had little influence on WGA-binding to GPIb.alpha.-depleted room temperature platelets (n=3). These results indicate that WGA binds mostly to oligosaccharides on GPIb.alpha. after chilling of human platelets, and it is very tempting to speculate that the Mac-1 lectin site also recognizes these exposed sugars on GPIb.alpha. leading to phagocytosis.

US-PAT-NO: 6806360

DOCUMENT-IDENTIFIER: US 6806360 B2

TITLE: Nucleic acids encoding human tissue factor inhibitor

DATE-ISSUED: October 19, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wun; Tze Chein	Ballwin	MO	N/A	N/A
Kretzmer; Kuniko K.	Wildwood	MO	N/A	N/A
Broze, Jr.; George J.	St. Louis	MO	N/A	N/A

APPL-NO: 10/ 377817

DATE FILED: March 4, 2003

PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATION

This application is a continuation of U.S. Ser. No. 09/627,676 filed Jul. 28, 2000, now U.S. Pat. No. 6,534,276, which is a continuation of Ser. No. 09/054,782 filed Apr. 3, 1998, now issued as U.S. Pat. No. 6,171,587, which is a continuation of Ser. No. 08/463,323 filed Jun. 5, 1995, now issued as U.S. Pat. No. 5,849,875, which is a continuation of Ser. No. 08/355,351 filed Dec. 13, 1994, now abandoned, which is a continuation of Ser. No. 08/093,285 filed Jul. 15, 1993, now issued as U.S. Pat. No. 5,466,783, which is a continuation of Ser. No. 07/566,280 filed Aug. 13, 1990, now abandoned, which is a division of Ser. No. 07/123,753, filed Nov. 23, 1987, now issued as U.S. Pat. No. 4,966,852, which is a continuation-in-part of application Ser. No. 07/077,366, filed Jul. 23, 1987, now abandoned.

US-CL-CURRENT: 536/23.5, 435/69.1 , 530/350

ABSTRACT:

A cDNA clone having a base sequence for human tissue factor inhibitor (TFI) has been developed and characterized and the amino acid sequence of the TFI has been determined.

2 Claims, 8 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 7

----- KWIC -----

Detailed Description Text - DETX (8):

FIG. 6 shows an alignment of the basic protease inhibitor domains of TFI with other basic protease inhibitors. All the sequences except TFI were obtained from the National Biomedical Research Foundation Protein Sequence Database (Georgetown University, Washington, D.C., release 13, June 1987). 1. Bovine basic protease inhibitor precursor; 2. Bovine colostrum trypsin

inhibitor; 3. Bovine serum basic protease inhibitor; 4. Edible snail isoinhibitor K; 5. Red sea turtle basic protease inhibitor (only amino acids 1-79 presented); 6. Western sand viper venom basic protease inhibitor I; 7. Ringhals venom basic protease inhibitor II; 8. Cape cobra venom basic protease inhibitor II; 9. Russell's viper venom basic protease inhibitor II; 10. Sand viper venom basic protease inhibitor III; 11. Eastern green mamba venom basic protease inhibitor I homolog; 12. Black mamba venom basic protease inhibitor B; 13. Black mamba venom basic protease inhibitor E; 14. Black mamba venom basic protease inhibitor I; 15. Black mamba venom basic protease inhibitor K; 16. .beta.-1-Bungarotoxin B chain (minor); 17. .beta.-1-Bungarotoxin B chain (major); 18. .beta.-2-Bungarotoxin B chain; 19. Horse inter-.alpha.-trypsin inhibitor [amino acids 1-57(1); 58-123 (2)]; 20. Pig inter-.alpha.-trypsin inhibitor [amino acids 1-57(1); 58-123(2)]; 21. Bovine inter-.alpha.-trypsin inhibitor [amino acids 1-57(1); 58-123(2)]; 22. Human .alpha.-1-microglobulin/inter-.alpha.-trypsin inhibitor precursor [amino acids 227-283(1); 284-352(2)]; 23. TFI amino acids 47-117(1); 118-188(2); 210-280(3)]. Gaps were included in 16, 17, 18 to achieve best alignment. Standard one letter codes for amino acids are used.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 09:18:53 ON 16 NOV 2004

=> fil .bec

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILES 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS,  
ESBIOBASE, BIOTECHNO, WPIDS' ENTERED AT 09:19:05 ON 16 NOV 2004  
ALL COPYRIGHTS AND RESTRICTIONS APPLY. SEE HELP USAGETERMS FOR DETAILS.

11 FILES IN THE FILE LIST

=> s protease# or metalloprote?

FILE 'MEDLINE'

75938 PROTEASE#

22288 METALLOPROTE?

L1 94616 PROTEASE# OR METALLOPROTE?

FILE 'SCISEARCH'

71230 PROTEASE#

24052 METALLOPROTE?

L2 92080 PROTEASE# OR METALLOPROTE?

FILE 'LIFESCI'

26004 PROTEASE#

4303 METALLOPROTE?

L3 29437 PROTEASE# OR METALLOPROTE?

FILE 'BIOTECHDS'

16798 PROTEASE#

514 METALLOPROTE?

L4 16948 PROTEASE# OR METALLOPROTE?

FILE 'BIOSIS'

83228 PROTEASE#

24861 METALLOPROTE?

L5 105396 PROTEASE# OR METALLOPROTE?

FILE 'EMBASE'

54425 PROTEASE#

20485 METALLOPROTE?

L6 72551 PROTEASE# OR METALLOPROTE?

FILE 'HCAPLUS'

98327 PROTEASE#

23476 METALLOPROTE?

L7 118421 PROTEASE# OR METALLOPROTE?

FILE 'NTIS'

614 PROTEASE#

223 METALLOPROTE?

L8 798 PROTEASE# OR METALLOPROTE?

FILE 'ESBIOBASE'

34722 PROTEASE#

11031 METALLOPROTE?

L9 43492 PROTEASE# OR METALLOPROTE?

FILE 'BIOTECHNO'

26983 PROTEASE#

9088 METALLOPROTE?



L10        34820 PROTEASE# OR METALLOPROTE?  
  
 FILE 'WPIDS'  
           14840 PROTEASE#  
           2160 METALLOPROTE?  
 L11        16547 PROTEASE# OR METALLOPROTE?  
  
 TOTAL FOR ALL FILES  
 L12        625106 PROTEASE# OR METALLOPROTE?  
  
 => s cobra and venom(5a)l12  
 FILE 'MEDLINE'  
           3280 COBRA  
           14299 VENOM  
           418 VENOM(5A)L1  
 L13        17 COBRA AND VENOM(5A)L1  
  
 FILE 'SCISEARCH'  
           2235 COBRA  
           14670 VENOM  
           428 VENOM(5A)L2  
 L14        30 COBRA AND VENOM(5A)L2  
  
 FILE 'LIFESCI'  
           784 COBRA  
           6519 VENOM  
           201 VENOM(5A)L3  
 L15        7 COBRA AND VENOM(5A)L3  
  
 FILE 'BIOTECHDS'  
           58 COBRA  
           462 VENOM  
           21 VENOM(5A)L4  
 L16        1 COBRA AND VENOM(5A)L4  
  
 FILE 'BIOSIS'  
           3447 COBRA  
           19587 VENOM  
           524 VENOM(5A)L5  
 L17        33 COBRA AND VENOM(5A)L5  
  
 FILE 'EMBASE'  
           2190 COBRA  
           17425 VENOM  
           393 VENOM(5A)L6  
 L18        16 COBRA AND VENOM(5A)L6  
  
 FILE 'HCAPLUS'  
           3850 COBRA  
           20726 VENOM  
           692 VENOM(5A)L7  
 L19        34 COBRA AND VENOM(5A)L7  
  
 FILE 'NTIS'  
           607 COBRA  
           295 VENOM  
           6 VENOM(5A)L8  
 L20        0 COBRA AND VENOM(5A)L8  
  
 FILE 'ESBIOBASE'  
           569 COBRA  
           4430 VENOM  
           242 VENOM(5A)L9  
 L21        12 COBRA AND VENOM(5A)L9

```

FILE 'BIOTECHNO'
    606 COBRA
    4053 VENOM
    182 VENOM(5A) L10
L22      6 COBRA AND VENOM(5A) L10

FILE 'WPIDS'
    145 COBRA
    979 VENOM
    25 VENOM(5A) L11
L23      3 COBRA AND VENOM(5A) L11

TOTAL FOR ALL FILES
L24      159 COBRA AND VENOM(5A) L12

=> s naja and venom(5a) l12
FILE 'MEDLINE'
    1352 NAJA
    14299 VENOM
    418 VENOM(5A) L1
L25      10 NAJA AND VENOM(5A) L1

FILE 'SCISEARCH'
    1245 NAJA
    14670 VENOM
    428 VENOM(5A) L2
L26      13 NAJA AND VENOM(5A) L2

FILE 'LIFESCI'
    627 NAJA
    6519 VENOM
    201 VENOM(5A) L3
L27      4 NAJA AND VENOM(5A) L3

FILE 'BIOTECHDS'
    25 NAJA
    462 VENOM
    21 VENOM(5A) L4
L28      1 NAJA AND VENOM(5A) L4

FILE 'BIOSIS'
    2748 NAJA
    19587 VENOM
    524 VENOM(5A) L5
L29      15 NAJA AND VENOM(5A) L5

FILE 'EMBASE'
    1130 NAJA
    17425 VENOM
    393 VENOM(5A) L6
L30      9 NAJA AND VENOM(5A) L6

FILE 'HCAPLUS'
    2876 NAJA
    20726 VENOM
    692 VENOM(5A) L7
L31      34 NAJA AND VENOM(5A) L7

FILE 'NTIS'
    44 NAJA
    295 VENOM
    6 VENOM(5A) L8
L32      0 NAJA AND VENOM(5A) L8

```

```

FILE 'ESBIOBASE'
    345 NAJA
    4430 VENOM
    242 VENOM(5A)L9
L33      9 NAJA AND VENOM(5A)L9

FILE 'BIOTECHNO'
    318 NAJA
    4053 VENOM
    182 VENOM(5A)L10
L34      6 NAJA AND VENOM(5A)L10

FILE 'WPIDS'
    36 NAJA
    979 VENOM
    25 VENOM(5A)L11
L35      2 NAJA AND VENOM(5A)L11

TOTAL FOR ALL FILES
L36      103 NAJA AND VENOM(5A) L12

=> s psgl or p(w)selectin
FILE 'MEDLINE'
    283 PSGL
    2350998 P
    9828 SELECTIN
    4015 P(W)SELECTIN
L37      4025 PSGL OR P(W)SELECTIN

FILE 'SCISEARCH'
    410 PSGL
    1114727 P
    13024 SELECTIN
    5801 P(W)SELECTIN
L38      5847 PSGL OR P(W)SELECTIN

FILE 'LIFESCI'
    95 PSGL
    203528 P
    2056 SELECTIN
    587 P(W)SELECTIN
L39      596 PSGL OR P(W)SELECTIN

FILE 'BIOTECHDS'
    14 PSGL
    29046 P
    224 SELECTIN
    71 P(W)SELECTIN
L40      73 PSGL OR P(W)SELECTIN

FILE 'BIOSIS'
    416 PSGL
    1103514 P
    11396 SELECTIN
    4837 P(W)SELECTIN
L41      4884 PSGL OR P(W)SELECTIN

FILE 'EMBASE'
    282 PSGL
    920367 P
    8932 SELECTIN
    3144 P(W)SELECTIN
L42      3162 PSGL OR P(W)SELECTIN

```

```

FILE 'HCAPLUS'
    459 PSGL
    2258689 P
    8336 SELECTIN
    3300 P(W) SELECTIN
L43    3315 PSGL OR P(W) SELECTIN

FILE 'NTIS'
    0 PSGL
    58573 P
    15 SELECTIN
    5 P(W) SELECTIN
L44    5 PSGL OR P(W) SELECTIN

FILE 'ESBIOBASE'
    231 PSGL
    362389 P
    5226 SELECTIN
    2059 P(W) SELECTIN
L45    2080 PSGL OR P(W) SELECTIN

FILE 'BIOTECHNO'
    139 PSGL
    187964 P
    3297 SELECTIN
    1014 P(W) SELECTIN
L46    1023 PSGL OR P(W) SELECTIN

FILE 'WPIDS'
    29 PSGL
    342150 P
    532 SELECTIN
    183 P(W) SELECTIN
L47    187 PSGL OR P(W) SELECTIN

TOTAL FOR ALL FILES
L48    25197 PSGL OR P(W) SELECTIN

=> s 148 and 112
FILE 'MEDLINE'
L49    97 L37 AND L1

FILE 'SCISEARCH'
L50    134 L38 AND L2

FILE 'LIFESCI'
L51    16 L39 AND L3

FILE 'BIOTECHDS'
L52    10 L40 AND L4

FILE 'BIOSIS'
L53    99 L41 AND L5

FILE 'EMBASE'
L54    67 L42 AND L6

FILE 'HCAPLUS'
L55    85 L43 AND L7

FILE 'NTIS'
L56    0 L44 AND L8

```

FILE 'ESBIOBASE'  
L57 43 L45 AND L9

FILE 'BIOTECHNO'  
L58 29 L46 AND L10

FILE 'WPIDS'  
L59 23 L47 AND L11

TOTAL FOR ALL FILES  
L60 603 L48 AND L12

=> s mocarhagin  
FILE 'MEDLINE'  
L61 21 MOCARHAGIN

FILE 'SCISEARCH'  
L62 20 MOCARHAGIN

FILE 'LIFESCI'  
L63 5 MOCARHAGIN

FILE 'BIOTECHDS'  
L64 1 MOCARHAGIN

FILE 'BIOSIS'  
L65 25 MOCARHAGIN

FILE 'EMBASE'  
L66 18 MOCARHAGIN

FILE 'HCAPLUS'  
L67 25 MOCARHAGIN

FILE 'NTIS'  
L68 0 MOCARHAGIN

FILE 'ESBIOBASE'  
L69 15 MOCARHAGIN

FILE 'BIOTECHNO'  
L70 9 MOCARHAGIN

FILE 'WPIDS'  
L71 2 MOCARHAGIN

TOTAL FOR ALL FILES  
L72 141 MOCARHAGIN

=> s (l24 or l36 or l60 or l72) not 1999-2004/py  
FILE 'MEDLINE'  
3054759 1999-2004/PY  
L73 49 (L13 OR L25 OR L49 OR L61) NOT 1999-2004/PY

FILE 'SCISEARCH'  
5836933 1999-2004/PY  
L74 47 (L14 OR L26 OR L50 OR L62) NOT 1999-2004/PY

FILE 'LIFESCI'  
613460 1999-2004/PY  
L75 13 (L15 OR L27 OR L51 OR L63) NOT 1999-2004/PY

FILE 'BIOTECHDS'  
113339 1999-2004/PY

L76                3 (L16 OR L28 OR L52 OR L64) NOT 1999-2004/PY  
 FILE 'BIOSIS'  
       3091164 1999-2004/PY  
 L77                59 (L17 OR L29 OR L53 OR L65) NOT 1999-2004/PY  
 FILE 'EMBASE'  
       2696788 1999-2004/PY  
 L78                36 (L18 OR L30 OR L54 OR L66) NOT 1999-2004/PY  
 FILE 'HCAPLUS'  
       5650086 1999-2004/PY  
 L79                53 (L19 OR L31 OR L55 OR L67) NOT 1999-2004/PY  
 FILE 'NTIS'  
       101266 1999-2004/PY  
 L80                0 (L20 OR L32 OR L56 OR L68) NOT 1999-2004/PY  
 FILE 'ESBIOBASE'  
       1679479 1999-2004/PY  
 L81                18 (L21 OR L33 OR L57 OR L69) NOT 1999-2004/PY  
 FILE 'BIOTECHNO'  
       611346 1999-2004/PY  
 L82                19 (L22 OR L34 OR L58 OR L70) NOT 1999-2004/PY  
 FILE 'WPIDS'  
       4970387 1999-2004/PY  
 L83                0 (L23 OR L35 OR L59 OR L71) NOT 1999-2004/PY  
 TOTAL FOR ALL FILES  
 L84                297 (L24 OR L36 OR L60 OR L72) NOT 1999-2004/PY

=> log y

COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

SESSION

FULL ESTIMATED COST

24.06

24.27

STN INTERNATIONAL LOGOFF AT 09:23:51 ON 16 NOV 2004